USGS
science for a changing world

Geospatial Data and Mapping Websites

Need help?

If you need help finding, ordering, or using USGS products; or if you have any questions about USGS science, contact USGS Science Information Services at: Phone: 1-888-ASK-USGS (1-888-275-8747); E-mail form or Live Chat: http://www.usgs.gov/ask

Primary Sources of FREE USGS Geospatial Data

The National Map http://nationalmap.gov/viewer.html

Download data from eight base data themes for the entire U.S.: Elevation (NED), Orthoimagery, Hydrography, Structures, Transportation, Geographic Names, Land Cover, and Boundaries. Additional products include the recent digital US Topo maps and historical topographic maps. Available lidar bare earth derivatives are incorporated into the 1/9 arc-second elevation data (NED).

Tiled Map Cache:	http://basemap.nationalmap.gov/ArcGIS/rest/services
Raster Data Services:	http://raster.nationalmap.gov/ArcGIS/rest/services
Vector Data Services:	http://services.nationalmap.gov/ArcGIS/rest/services
NED Status Service:	http://igskmncnvs526.cr.usgs.gov/arcgis/rest/services

EarthExplorer* http://earthexplorer.usgs.gov

Query, locate, and download or order data from more than 180 collections that span over 70 years of coverage. Includes USGS satellite imagery, historical and recent aerial photography, elevation data, land cover products, lidar point cloud data, Digital Line Graphs (DLGs), Digital Orthophoto Quads (DOQs), and much more.

GloVis* http://glovis.usgs.gov

This browse-based viewer is less robust than EarthExplorer, but is easier to search and more user-friendly. Download Landsat, ASTER, EO-1, and MODIS data products, as well as recent aerial photograph collections.

Additional FREE Geospatial Data from USGS & Partners

TerraLook* http://terralook.cr.usgs.gov
Georeferenced Landsat and Aster satellite images in JPEG format for users who don't want to use complicated software. Perfect for simple visual interpretation and to track changes over time. Download optional free software to perform very basic manipulations. The Landsat images are preselected for best views.

LandsatLook *
http://landsat.usgs.gov/LandsatLookImages.php
Full-resolution JPEGs of Landsat satellite images that are best used for image selection and simple visual interpretation. Available as thermal or natural color images with optional geographic reference. Not recommended for digital analysis.

Coastal & Marine Interactive Map Server
http://coastalmap.marine.usgs.gov
GIS data and metadata for past and current projects.

Data.gov* http://www.data.gov
Geospatial information from all levels of U.S. government and the public.

Water Spatial Data http://water.usgs.gov/maps.html
Maps and GIS data for water related topics such as water use maps and data, watershed boundaries, NHD, streamflow records, and more.

Hazards Data Distribution System (HDDS)*
http://hdds.usgs.gov/hdds2
A dynamic online map interface for viewing and downloading USGS datasets for national or international disasters including floods, hurricanes, and earthquakes.

Mineral Resources On-Line Spatial Data*
http://mrdata.usgs.gov
A source for regional and global geology, geochemistry, geophysics, and mineral resource maps and data.

USGS Quaternary Fault and Fold Database
http://earthquake.usgs.gov/regional/qfaults
Geologic, geomorphic, and geographic information for over 2,000 Quaternary faults in the U.S. Download shape files and Google Earth files.

National Geologic Map Database http://ngmdb.usgs.gov
Search over 90,000 maps and reports, including free digital maps and GIS map data. Primary themes are geology, geophysics, marine, energy resources, and natural hazards.

USGS Publications Warehouse* http://pubs.usgs.gov
Search bibliographic citations for USGS publications. Links to online sources for many publications, including maps.

Maps of America's Submerged Lands
http://woodshole.er.usgs.gov/data/submergedlands
USGS maps, reports, and digital data that depict the bathymetry, surficial geology, and/or subsurface structure of selected submerged U.S. areas. Mostly marine, but includes some lakes.

Where to Get Digital (FREE) and Printed Topographic Maps

Free Digital US Topo Quadrangles in GeoPDF format (updated every 3 years)
- For individual maps, go to the USGS Store http://store.usgs.gov and Click "Map Locator & Downloader"
- For large blocks of maps, go to *The National Map* Viewer http://nationalmap.gov/viewer.html

Free Digital Historical Quadrangles in GeoPDF format
- The USGS Store http://store.usgs.gov (Click "Map Locator & Downloader")
- Historical Topographic Map Collection http://geonames.usgs.gov/pls/topomaps
- TopoView http://ngmdb.usgs.gov/maps/TopoView

Purchase paper copies of US Topo Quadrangles or Historical Topographic Quadrangles
- The USGS Store http://store.usgs.gov (Click "Map Locator & Downloader")

Other Sites of Interest

United States Interagency Elevation Inventory
http://www.csc.noaa.gov/digitalcoast/tools/inventory
Where to find high-accuracy topographic and bathymetric data for the U.S., including lidar, IfSAR, hydrographic surveys, multibeam data, and bathymetric lidar.

GIS Lessons for the Classroom
http://education.usgs.gov/gislab.html
Use ArcView or ArcGIS to explore the geography of Africa or to create a DEM.

USGS Resources for Working with Topographic Maps
http://education.usgs.gov/lessons/mapresources.html
List of links for interpreting and using topographic maps; working with coordinates, datums, and projections; and classroom activities that use topographic maps.

The National Map Corps
http://nationalmap.gov/TheNationalMapCorps/index.html
Citizen mapping! Volunteer map data collection projects including input on structure locations.

*Includes international data or information

Rapid Data Distribution System (RDDS)* 4.0
http://rmgsc.cr.usgs.gov/rdds/index.shtml
Developed to aid incident management teams, wildland fire specialists, and other emergency response personnel, this application displays both vector and raster datasets of the continental U.S., including several dynamic layers representing current hazards events (wildfires, earthquakes, etc.).

Geographic Names Information System (GNIS)
http://geonames.usgs.gov
The GNIS contains information about physical and cultural geographic features of all types in the U.S. and defines the feature location by state, county, USGS topographic map, and geographic coordinates.

StreamStats http://water.usgs.gov/osw/streamstats/
Web-based GIS that provides access to an assortment of analytical tools useful for water-resources planning and management, and for engineering design applications. Easily obtain streamflow statistics, drainage-basin characteristics, and other information for user-selected sites on streams.